## **Appendix C: Complexities in Analyzing State Trading Practices**

The tariff/subsidy equivalent approach that has been proposed to analyze the distortionary impacts of STEs is relatively simple. It transforms the entire set of policies and activities associated with state trading into one easily understood summary measure that can be compared over time, and across commodities, policies, and countries. But is the analytical framework completely adequate for addressing the economic concerns associated with state trading?

A primary concern with state trading enterprises is their ability to distort trade by cross-subsidizing across markets. Does the tariff/subsidy equivalent approach capture this potential to distort trade? The answer is yes, if the tariff/subsidy equivalents are measured in two or more markets rather than in a single market. Hence, cross-subsidization between the internal and external markets could be measured as higher protection (tariff equivalents) in the domestic market and greater subsidization (export subsidy equivalents) in foreign markets. The same would be true for cross-subsidization across commodities. Tariff/subsidy equivalents could be measured in different markets.<sup>22</sup>

Price pooling, where the final price paid to producers is a blended price based on the net revenue from all sales in the foreign and domestic markets, is often cited as another STE activity that distorts trade. Is the impact of price pooling reflected in the tariff/subsidy equivalent? We believe that it is because the analytical issue is no different from cross-subsidization across markets or products. Where the analysis becomes more complex is in cases of price pooling across time (between years). In this situation, the tariff equivalent should be calculated over the length of time in which the policy is applicable. Pooling across time may affect stocks and hence trade. But even here, it is difficult to argue that pooling has an unequivocal effect on the volume of trade.

Does the price gap capture the competitive advantage that STEs might secure from governmental association? Tax benefits, transport subsidies, and preferential exchange rates are some of the provisions that are most often cited. If we assume that the objective of the STE is to maximize profits with price as the decision rule, then conceptually these facilities do not pose any problems for the analytical framework. Clearly, if the STE sets prices to maximize its profits taking into account the effects of these provisions, then the price gap will capture provisions that facilitate STE activities. However, if profit maximization is not the goal or if there are cases where the tariff equivalent does not capture the effects of certain special privileges, then it will be necessary to calculate the tariff or subsidy equivalents of the policy and come up with alternative measures such as producer and consumer subsidy equivalents (OECD, 1987). Input subsidies, or policies that are defined as part of WTO internal support disciplines, may fall in this category.

The use of so-called "hidden" or implicit subsidies associated with certain STE activities has played an important role in the debate on STEs. To the extent that these are not reflected in either domestic or trade prices, it could suggest that the tariff/subsidy equivalent does not adequately represent the trade impacts of STEs. For instance, it may be difficult to quantify the benefits for STEs in making long-term agreements with other public enterprises or governments. But such cases are likely to be few and far between, and the concerns relate not necessarily to the appropriateness of the analytical framework but rather to the availability of data about these activities.

The proposed tariff/subsidy equivalent approach measures the effect on prices and quantities traded by comparing the behavior of STEs against competitive standards. Some would argue that this is not an adequate description of agricultural markets and it may be inappropriate to assume that these markets would behave competitively in the absence of state trading. Under these circumstances, they argue, the estimation procedure will overestimate the subsidy equivalent unless the removal of the state trading activity will also change the structure of the market in question to a perfectly competitive one (Veeman, Fulton, and Larue, 1999). This suggests that our approach provides a more accurate representation of the benefits of deregulating state trading activities in cases where market concentration is minimal.

The tariff/subsidy equivalent approach is designed exclusively to capture the overall trade effects of STE

<sup>&</sup>lt;sup>22</sup>This section draws heavily on Dixit and Josling's *State Trading in Agriculture: An Analytical Framework*, International Agricultural Trade Research Consortium Working Paper No. 97-4, July 1997.

activities. It represents a summary measure of the impacts of a multitude of objectives and activities, and does not allow a one-to-one mapping between objectives/activities and the trade impacts. But, we know that state traders may pursue several activities/objectives. For instance, some STEs have been established to ensure price stability in the domestic economy. Others may have been created to

help implement health and sanitary guidelines, facilitate acquisition of rents for the government, or expedite political mandates. The tariff/subsidy equivalent approach cannot isolate the impacts of such specific activities. Hence, alternative approaches would have to be developed to measure the trade impacts of individual objectives or activities.